CLINICAL BIOMECHANICS

gait

casts, stress, 35

force, surgery, 199

crutches, paraplegia, 97

prosthetics, symmetry, 88

INDEX: VOLUME 5 1990

SUBJECT INDEX

anatomy lumbar, muscle, 9 assesment, dynamics, 187, 205 kinematics, surgery, 3 model, pressure, 145 assessment ankle, dynamics, 187, 205 bone, CT, 193 exercise, posture, 239 lifting, lumbar, 172 neurology, posture, 73 backpain posture, spine, 161 assessment, CT, 193 hip, nutrition, 154 cartilage force, knee, 115 gait, stress, 35 computer foot, shape, 229 model, spine, 167 sitting, spine, 129 crutches gait, paraplegia, 97 assessment, bone, 193 dynamics ankle, assessment, 187, 205 ergonomics, shoulder, 81 intra-abdominal pressure, muscle, 59 lumbar, muscle, 51

ergonomics

exercise

EMG, shoulder, 81

lumbar, muscle, 30

computer, shape, 229

cartilage, knee, 115

gait, surgery, 199

assessment, posture, 239

models, thoracolumbar, 241, 242, 243

shock, sports, 47 bone, nutrition, 154 intra-abdominal pressure EMG, muscle, 59 isokinetics knee, rehabilitation, 68 kinematics ankle, surgery, 3 knee, ligament, 41 lumbar, mobility, 218 models, walk, 108 cartilage, force, 115 kinematics, ligament, 41 isokinetics, rehabilitation, 68 muscle, pelvis, 17 muscle, stiffness, 23 assessment, lumbar, 172 ligament kinematics, knee, 41 loading models, spine, 135 lumbar anatomy, muscle, 9 assessment, lifting, 172 EMG, muscle, 51 fascia, muscle, 30 kinematics, mobility, 218 measure movement, shoulder, 123 kinematics, lumbar, 218 scoliosis, stiffness, 117 model ankle, pressure, 145 computer, spine, 167 fascia, thoracolumbar, 241, 242, 243 kinematics, walk, 108 loading, spine, 135

movement measure, shoulder, 123 muscle anatomy, lumbar, 9 EMG, intra-abdominal pressure, 59 EMG, lumbar, 51 fascia, lumbar, 30 knee, pelvis, 17 knee, stiffness, 23 neurology assessment, posture, 73 nutrition bone, hip, 154 paraplegia crutches, gait, 97 pelvis knee, muscle, 17 posture assessment, neurology, 73 assessment, exercise, 239 backpain, spine, 161 pressure ankle, model, 145 prosthetics gait, symmetry, 88 rehabilitation knee, isokinetics, 68 scoliosis mobility, stiffness, 117 shape computer, foot, 229 shock gait, sports, 47 shoulder EMG, ergonomics, 81 measure, movement, 123 creep, spine, 129 backpain, posture, 161 computer, model, 167 creep, sitting, 129 loading, models, 135 gait, shock, 47 stiffness knee, muscle, 23 mobility, scoliosis, 117

246 Subject Index

strength surgery, wire, 236 stress casts, gait, 35 surgery ankle, kinematics, 3 force, gait, 199 strength, wire, 236 symmetry gait, prosthetics, 88 thoracolumbar fascia, models, 241, 242, 243

walk kinematics, models, 108 wire strength, surgery, 236

AUTHOR INDEX

Anderson J M see Johnson G R, 131
Andres R O and Stimmel S K,
Prosthetic alignment effects on gait
symmetry: a case study, 88
Aspden R M and Hukins D W L,

Letter, 242

Aspden R M see Hukins D W L, 30 Barnard R J see Hou, J C-H, 162 Ben-Shoshan I see Dvir Z, 68 Biedermann H J,

Weight-lifting in a postural restraining device: a reliable method to generate paraspinal constant force contractions, 180

Bohannon R W see Gajdosik R L, 23 Bohannon R W, Reed M L and Gajdosik R L,

Electrically evoked knee flexion torque increases with increased pelvifemoral angles, 17

Bruns J and Rosenbach B, Pressure distribution at the ankle joint, 153

Chaffin D B, Redfern M S, Erig M and Goldstein S A, Lumbar muscle size and locations from CT scans of 96 women of age 40 to 63 years, 9

Cox A J,

Biomechanics of the patello-femoral joint, 123

Crosbie W J and Nicol A C, Biomechanical comparison of two paraplegic gait patterns, 97 Cross A T see Pearcy M J, 218

DiFazio F see Incavo S J, 236 Dogan S see Manley P A, 199 Dumas G A see Reid J G, 169

Dvir Z, Shklar A, Halperin N, Robinson D, Weissman I and Ben-Shoshan I, Concentric and eccentric torque variations of the quadriceps femoris in patellofemoral pain syndrome, 68

Ekholm J see Hammarsjköld E, 81 Erig M see Chaffin D B, 9 Foulston J, Lord M and West S, Changes in plantar surface shape induced by corrective forefoot

eversion, 229 Frigo C,

Three-dimensional model for studying the dynamical loads on the spine during lifting, 135

Gaffron I D see Wytch R, 35 Gajdosik R L see Bohannon R W, 17 Gajdosik R L, Giuliani C A and Bohannon R W,

Passive compliance and length of the hamstring muscles of healthy men and women, 23

Gauffin H, Pettersson G and Tropp H, Kinematic analysis of one-leg long hopping in patients with an old rupture of the anterior cruciate ligament, 41

Gauffin H, Jarenmark R and Tropp H, Implementation of a two-dimensional biomechanical model in an optoelectronic motion analysis system, 108 Giuliani C A see Gajdosik R L, 23 Goldstein S A see Chaffin D B, 9

Hallett M see Panzer V P, 73 Halperin N see Dvir Z, 68 Hammarskjöld E, Harms-Ringdahl, K and Ekholm J,

Shoulder-arm muscular activity and reproducibility in carpenters' work, 81 Hansson T see Magnusson M, 129

Harms-Ringdahl K see Hammarskjöld E, 81

Hickey D S see Hukins D W L, 30 Hindle R J see Pearcy M J, 218 Hodapp N see Müller-Gerbl M, 193 Hou J C-H, Zernicke R F and Barnard R J,

High fat-sucrose diet effects on femoral neck geometry and biomechanics, 162

Hukins D W L see Aspden R M, 242 Hukins D W L, Aspden R M and Hickey D S,

Thoracolumbar fascia can increase the efficiency of the erector spinae muscles, 30

Hult E see Magnusson M, 129

Incavo S J, DiFazio F and Wilder D, Strength of cerclage fixation systems: a biomechanical study, 236

Jarenmark R see Gauffin H, 108 Johnson G R and Anderson J M, Measurement of three-dimensional shoulder movement by an electromagnetic sensor, 131

Johnson G R,

Measurement of shock acceleration during walking and running using the Shock Meter, 47

Kearney R E see Weiss P L, 187 Kearney R E, Weiss R L and Morier R, System identification of human ankle dynamics: intersubject variability and intrasubject reliability, 205 Kohles S S see Manley P A, 199

Lindell V see Magnusson M, 137 Lindström I see Magnusson M, 137 Lord M see Foulston J, 229

MacDonald R.

Letter: reply to Pearcy letter, 243

Magnusson M, Hult E, Lindstrom I, Lindell V, Pope M and Hansson T, Measurement of time-dependent height-loss during sitting, 137

Manley P A, Vanderby R, Dogan S, Kohles S S and McBeath A A, Ground reaction force comparison of canine cemented and cementless total hip replacement, 199

Marshall R N, Wood G and Nade S, Effects of ankle arthrodesis on walking: kinematic and kinetic studies, 3

McBeath A A see Manley P A, 199
McGill S M and Sharratt M T,
Relationship between intraabdominal pressure and trunk EMG,
50

Miller D H T see Pearcy M J, 218
Mitchell C G see Wytch R, 35
Moore K see Reid J G, 169
Morier R see Weiss P L, 187
Morier R see Kearney R E, 205
Moxham K E see Pearcy M J, 241
Müller-Gerbl M, Putz R, Hodapp N,
Schulte E and Wimmer B,
Computed tomographyosteoabsorptiometry: a method of
assessing the mechanical condition
of the major joints in a living subject,

Nade S see Marshall R N, 3 Neil G see Wytch R, 35 Nicol A C see Crosbie W J, 97

193

Panzer V P and Hallett M, Biomechanical assessment of upright stance in Parkinson's disease: a singlesubject study, 73

Pearcy M J, Hindle R J, Cross A T and Miller D H T,

Three-dimensional kinematics of the human back, 218 Pearcy M J, Williams D R G and

Moxham K E, Letter on thoracolumbar fascia, 241

Petterson G see Gauffin H, 41

Pope M see Magnusson M, 129

Putz R see Müller-Gerbl M, 193

Redfern M S see Chaffin D B, 9

Reed M L see Bohannon R W, 17

Reid J G, Moore K and Dumas G A,

Postural changes associated with pregnancy and their relationship with low-back pain, 169

Robinson D see Dvir Z, 68 Rosenbach B see Bruns J, 153 Scholten P J M see Veldhuizen A G, 117 Schulte E see Müller-Gerbl M, 193 Sharratt M T see McGill S M, 59 Shklar A see Dvir Z, 68 Singer A J,

Effects of supplementary exercise intervention programmes on the posture of adolescent boys: THESIS SUMMARY, 239

Stimmel S K see Andres R O, 88

Tracy MF,

Three-dimensional force model of the low-back for simple computer programming, 175 **Tropp H** see Gauffin H, 41

Tropp H see Gauffin H, 41 Tropp H see Gauffin H, 108 Vanderby R see Manley P A, 199 Veldhuizen A G and Scholten P J M, Flexibility in structurally normal young females and young females with idiopathic scoliosis, 117

Vink P,

A method to study the lumbar back muscle activity to be used in back pain prevention: THESIS SUMMARY, 51

Wardlow D see Wytch R, 35
Weiss P L, Kearney R E and Morier R,
Quantitative assessment of ankle joint
dynamics during recovery from
injury, 187

Weiss R L see Kearney R E, 205
Weismann I see Dvir Z, 68
West S see Foulston J, 229
Wilder D see Incavo S J, 236
Williams D R G see Pearcy M J, 241
Wimmer B see Müller-Gerbi M, 193
Wood G see Marshall R N, 3
Wytch R, Mitchell C G, Gaffron I D,
Neil G and Wardlow D,
Determination of stresses in belowknee walking casts, 35
Zernicke R F see Hou J C-H, 162

